

Learning to
live well with
2009 **Diabetes**





If you have diabetes, this booklet is for you.

It will help you understand the basic information about diabetes and how to manage it. Diabetes is a serious disease that affects 50 thousand Vermonters. Diabetes means that your blood sugar is too high. The good news is that by working with your medical provider, you will be able to control your blood sugar and stay healthy. When you learn how to manage your blood sugar, you will be able to live a full and active life! This booklet can help you.

What is Diabetes?

Diabetes means that your blood sugar is too high. Your body changes much of the food you eat into sugar, also called glucose. Your blood carries this sugar to the cells in your body. Glucose is the major source of energy for your body. Your body needs insulin to help change glucose into energy.

Diabetes is a disease that can stop your body from making insulin or prevent it from using insulin properly. When you have diabetes, your body can't change glucose into energy. Some parts of your body can't get enough glucose for energy. Other parts can be harmed when exposed to too much glucose. Diabetes affects all parts of the body.

Diabetes is a serious disease. When the body is exposed to high blood sugar over a long period of time there can be serious damage to blood vessels and nerves. People who have poorly controlled diabetes have a greater risk of developing heart disease, kidney disease, blindness, and loss of feeling in their feet and legs.

How do you know if you have diabetes?

Your medical provider checks your blood to see if you have diabetes. If the level of glucose in your blood is higher than normal, then you have diabetes.

There are two tests that can measure your blood sugar:

- **Random blood sugar:** This test can be drawn at any time. A person has diabetes if the random blood sugar is greater or equal to 200 mg/dl and symptoms of diabetes are present.
- **Fasting blood sugar:** This test is drawn in the morning before you eat anything. The strict rule for determining if someone has diabetes is that a person has two separate fasting blood sugar levels of 126 mg/dl or greater.

What kind of diabetes do you have?

There are two main types of diabetes: type 1 and type 2.

Knowing what type of diabetes you have will help you take better care of yourself.

Type 1. People with type 1 diabetes don't make any insulin and must take insulin shots. Type 1 diabetes once was called juvenile or insulin-dependent diabetes. Type 1 diabetes is usually seen in children, but sometimes appears in adults.

Type 2. People with type 2 diabetes either don't make enough insulin or can't properly use the insulin that they do make. Most people with type 2 diabetes are overweight and inactive. Some people with type 2 diabetes can manage their blood sugar by eating healthy foods and being physically active every day. Others may need pills or insulin or both. Type 2 diabetes once was called non-insulin dependent diabetes or adult-onset diabetes. Most people with diabetes have type 2, and they can get it at any age.

Terms that are no longer used include:

- "a touch of diabetes"
- "borderline diabetes"
- "sugar's a little high"

What To Do

If you have diabetes you can be healthy and reduce the risks of complications when you:

- **eat healthy, nutritious food in moderate amounts**
- **are physically active every day**
- **check your blood sugar (glucose) regularly**
- **take the medicine or insulin that your medical provider prescribes**
- **see your medical provider regularly**

Neighbors

“When my doctor told me I had diabetes, it scared me. Would I need to use needles and stop eating the food I like? Would I be sick the rest of my life?

I went home and told my wife, Barbara, and we read the handout the doctor gave us. We called the number on it and made an appointment with a diabetes educator to learn more about diabetes.

We've been meeting some other people in the same boat. We learned about some ways to get exercise here in our town. I'm learning how to keep my blood sugar down, and we still eat good meals. It's not so bad.

I'm glad I found out about my diabetes early enough so I can do something about it. Sure, some days it's a nuisance, but I can handle it. I've actually lost a few pounds and I'm feeling pretty good.”

How to find a Diabetes Educator

Web sites:

www.vpqhc.org/VTADE, click on community resources

www.diabetes.org/recognition/education

Telephone numbers:

Diabetes Prevention and Control Program, Vermont Department of Health 1-800-464-4343 or 802-863-7606



What You Should Know About Food

Some of the best ‘medicine’ for controlling diabetes comes right from your own kitchen. Food is the fuel that keeps your body working. The physical activity you do, the medicine you take, your blood sugar level — all are affected by how much and what you eat.

Don't give up your favorite foods! Learn how much to eat, how often to eat, and how to prepare healthy foods that you love.

A meal plan should be something that works well for you. There are no

forbidden foods for a person with diabetes. Advising people to “just cut out sugar” is no longer true.

The foods that are healthy for you are the same foods that are healthy for people without diabetes. A dietitian, who is an expert in nutrition, can help you make a meal plan with the foods you like. Ask your medical provider for a referral or check www.eatrightvt.org. Local diabetes education programs can help too. They are found in every area of Vermont. See the back page for more information.

Neighbors

“You always hear that vegetables are good for you. I must admit that I’ve struggled with eating enough. I’d buy them, but I never knew how to make them taste good. And all the cutting and chopping was such a pain! Before I knew it, the vegetables would go bad and I’d throw them out. What a waste of money!

But then I decided to change my thinking about vegetables. I started to look for ways to mix them into my everyday foods. Now I look for foods that are already made with lots of vegetables like

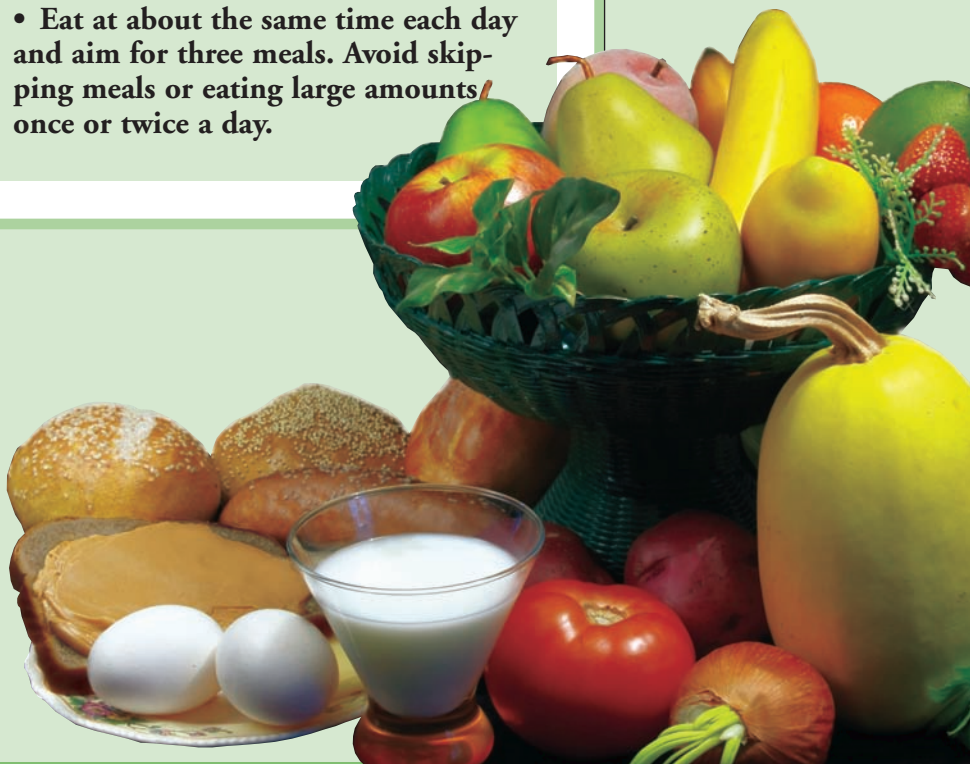
minestrone soup or vegetarian versions of lasagna or chili. I also started adding more vegetables to foods like sandwiches and pizza. After a while, I realized that I actually liked having more vegetables.

They give my meals color and flavor, and I feel like I can eat more. I never knew something so healthy for me could be so easy and good! ”

How to Eat Well

Getting Started...

- Choose basic simple foods with short lists of ingredients instead of highly processed foods.
- Buy whole grain breads and cereals that list 100% whole grain as the first ingredient.
- Let vegetables take up the most space on your plate — the more colorful, the better.
- Add small amounts of lean meat, skinless poultry, fish, or canned, rinsed kidney beans and other legumes for protein.
- Choose low fat or fat-free dairy products like skim milk, low-fat yogurt, and low-fat cheeses.
- Flavor your meals with small amounts of olive oil, nuts, herbs and spices. Skip the butter, stick margarine, lard, shortening and fried foods.
- Select drinks that won't increase your blood sugar such as water, sparkling water or diet drinks.
- Eat at about the same time each day and aim for three meals. Avoid skipping meals or eating large amounts once or twice a day.



A Word About Weight Control

Controlling weight helps in managing diabetes. Don't worry if you have a lot of weight to lose. Losing even a few pounds can lower your blood sugars, especially if you have type 2 diabetes that was recently diagnosed. Weigh yourself once a week to see how you're doing.

There is no magic diet or pill for losing weight and keeping it off. If you eat less than you burn, you will lose weight. So aim to eat a little less and move more! These eating guidelines can help:

- Follow a sensible eating plan and pay attention to portion sizes.
- Don't eat when you're doing something else such as driving or watching TV. Instead sit down at a table to eat; it's easier this way to pay attention to what and how much you eat.
- Use smaller plates and glasses to keep portion sizes in check.
- Make most of your food "healthy" choices and keep less healthy "treats" to smaller amounts on special occasions.

Neighbors

“I had a big bagel with cream cheese for breakfast the other day and my blood sugar was sky high all day. I didn't realize how much carbohydrate was in one bagel.... almost as much as eating 5 pieces of toast!!!! I need to watch my portions, maybe two pieces of toast would have been a better choice.”

What's Your Portion Size?

A good first step in controlling your weight is to look at the size of your food portions. Do you know how your portions compare to what is considered sensible? A list of standard portions for different types of food is on the inside back cover.

Quick Tip for Controlling Portions

Divide your plate into sections. Draw an imaginary line through the center of your plate. Divide one of those sections into two. One of the smaller sections should contain grains or starchy foods like rice, pasta, corn or peas. Fill the other smaller section with protein like

starchy vegetables like spinach, broccoli, green beans or salad. Then add a glass of milk and a piece of fruit for dessert, and you have a healthy, portion-controlled meal! For other portion control tips go to: <http://healthvermont.gov/prevent/diabetes/diabetes.aspx>, under Diabetes

meat, fish, poultry or legumes. Pile up the last half of your plate with non-

Toolkit click on Diabetes: lose a little weight... gain a lot of control.



What You Should Know About Carbohydrate (carbs)

Food is fuel for the body — the fuel or energy needed to work, play and do the things you want to do. Foods that contain carbohydrates give you quick energy. Your body turns these carbohydrates into glucose (sugar) which it uses for fuel like a car uses gasoline. Because diabetes causes sugar to build up in the blood, it is important to keep track of how much carbohydrate you eat so you don't load yourself with too much.

Having diabetes does NOT mean that you need to cut carbohydrates out of your diet! Carb-containing foods have nutrients that are essential to health, especially if you choose high quality carbs like whole grains and vegetables. The key is to know how much carb you are eating and to balance those foods with exercise and other glucose-lowering tools (medicines). Foods that contain carbohydrate include:

- Grains such as cereal, bread, pasta and rice
- Starchy vegetables like potatoes, kidney beans, peas, corn
- Fruits and juices
- Milk and yogurt
- Sweets, desserts and many beverages
- Other vegetables

Counting Carbs

Most women can have 45-60 grams of carb per meal; most men can have 60-75 grams of carb per meal. It is important to learn the number of carbs in the foods you eat. One way to do this is to read the Nutrition Facts panel on food labels. Below is the food label from a can of baked beans.

1. Start by looking at the serving size. The calories, fat and other nutrient amounts listed are for the serving size noted on the label. How does your portion size compare? If your portion is smaller or larger than 1/2 cup you will need to do some math. For example, if you ate a cup of the beans, you would need to double all of the values listed on the label.

2. Look at the total carbs. Does this food have too many carbs to fit in with the rest of your food choices? Will you need to cut back on the amount you eat, or skip another carb-containing food to fit this into your meal? Note that dietary fiber and sugars are included in the total carb number. It's best to choose foods with higher numbers for fiber and lower numbers for sugar.

Nutrition Facts		
Serving Size 1/2 cup (130 g)		
Servings per container: About 3.5		
Amount Per Serving		
Calories	130	Calories From Fat 0
% Daily Value*		
Total Fat	0g	0%
Saturated Fat	0g	0%
Trans Fat	0g	
Cholesterol	0 mg	0%
Sodium	530mg	23%
Total Carbohydrates	29g	10%
Dietary Fiber	5g	20%
Sugars	12g	
Protein	6g	
Vitamin A	0%	Vitamin C 0%
Calcium	4%	Iron 10%
*Percent daily values are based on a 2,000 calorie diet.		
Ingredients: Prepared white beans, water, brown sugar, sugar, tomato paste, salt, corn starch, mustard (water, vinegar, mustard seed, salt, turmeric, spices), onion powder, spices, extractive of paprika, garlic powder, and natural flavor.		

3. Limit how much you eat of these nutrients. Use the percent daily value to get an idea if the food supplies a lot or a little of each nutrient. Five percent or less is low; 20% or more is high. In general, choose foods with lower % daily values for fat, saturated fat, and sodium. Aim for higher numbers for fiber, vitamin A, vitamin C, calcium and iron.

4. The ingredient list tells you what's in the food. Ingredients are listed in decreasing order so you know that the product contains more of the ingredients listed first, second or third, and less of those listed toward the end. In these ingredients, brown sugar and sugar are listed third and fourth. There may be other healthier baked beans with less added sugar. Look for the different names for sugar on ingredient lists, and avoid those that have ingredients such as corn syrup, high-fructose corn syrup, fruit juice concentrate, maltose, dextrose, sucrose, honey, and maple syrup.

Neighbors

“Sometimes people get the idea that there is almost nothing good someone with diabetes can eat. I really limited my diet for over a year. I never had dessert. Then one day a person with diabetes told me he'd had an ice cream bar for lunch. ‘How could you do that,’ I exclaimed. ‘It's easy,’ he said. ‘It's all about counting carbohydrates. Just count the 30 grams of carbohydrate in the ice cream bar as part of your daily total.

I went out that day and had an ice cream, made sure I had enough insulin to cover, and what a joy to savor! I don't do that every day. But it's so liberating to realize that no food is off limits. I just need to count my total carbohydrates and pay attention to my blood sugar.”

A piece of cake!

The number of carbohydrate choices per day should be balanced between meals and snacks in a way that helps keep your blood sugar in good control. But what if today is your birthday and

you want a piece of cake? Do you say “Today, I'm just not going to follow my diet and if my blood sugars go up, it's no big deal”? That's not a great idea. If you count carbs you can figure it out. Here's how: you know that the small potato you usually eat has 15 grams of carb (1 carb serving) and the slice of bread is also 15 grams of carb. A 2-inch square of frosted cake has 30 grams of carb (2 carb servings). Give up the potato and bread but eat (and enjoy!) the cake.

Books:

“Diabetes Meal Planning Made Easy, Complete Guide to Carb Counting,” and others. American Diabetes Association. <http://store.diabetes.org> or call 1-800-232-6733.

“The Corinne T. Netzer Carbohydrate Counter.” “The EatingWell Diabetes Cookbook.” Available in most bookstores or online.

Online:

American Diabetes Association <http://www.diabetes.org> Click on Nutrition & Recipes.

Vermont Department of Health <http://healthvermont.gov/eatforhealth> <http://healthvermont.gov/prevent/diabetes/diabetes.aspx>

Putting It into Practice

Ideas for Healthy Eating

Breakfast:

- Enjoy a whole wheat English muffin spread with a thin layer of peanut butter. Pair with a bowl of fresh strawberries or apple slices.
- Cook up a steaming bowl of old-fashioned rolled oats. Add a few walnuts and raisins for crunch, flavor and color.
- Try adding yogurt to your cereal if you don't like milk. For variety, try mixing different types of dry cereal together. A little sweetened cereal mixed in with unsweetened cereal adds some flavor.

Lunch and Dinner:

- Make a turkey sandwich using whole grain bread. Top with vegetables like lettuce, tomato, onions, and peppers. Have a salad or vegetable soup on the side instead of chips or fries.
- Enjoy a bowl of bean chili or lentil soup. Serve with a spinach salad lightly dressed with an olive oil-based dressing.

- Top a baked potato with low-fat cheddar and steamed broccoli. Or try other toppings such as salsa, low-fat plain yogurt, or low-fat cottage cheese.
- Grill or stir fry chicken breasts; cook with fresh or frozen vegetables and seasonings of your choice. Serve over rice or noodles.
- Top whole wheat pasta with a chunky marinara sauce. Check the fridge and add left-over meat and vegetables. Serve with green beans and a salad.

Snacks:

- Sprinkle air-popped popcorn with garlic powder or another seasoning for a spicy treat.
- Spread peanut butter on whole grain crackers, an apple, or celery sticks.
- Dip baby carrots in hummus, a yummy spread made with garbanzo beans.

Sorting Out the Numbers

1 carb choice = 15 grams of carbohydrate

Examples of 1 carb choice:

- 1 slice of bread or 1/2 English muffin
- 6 saltine type crackers
- 1 small piece of fruit
- 1/2 cup peas, corn, or potato
- 1/2 cup cooked rice or pasta
- 1 cup milk or plain yogurt

If you are hungry between meals, aim for a snack that has between 15-30 grams of carb. This equals 1-2 carb choices.

Sample Menu for a 1600 Calorie Meal Plan

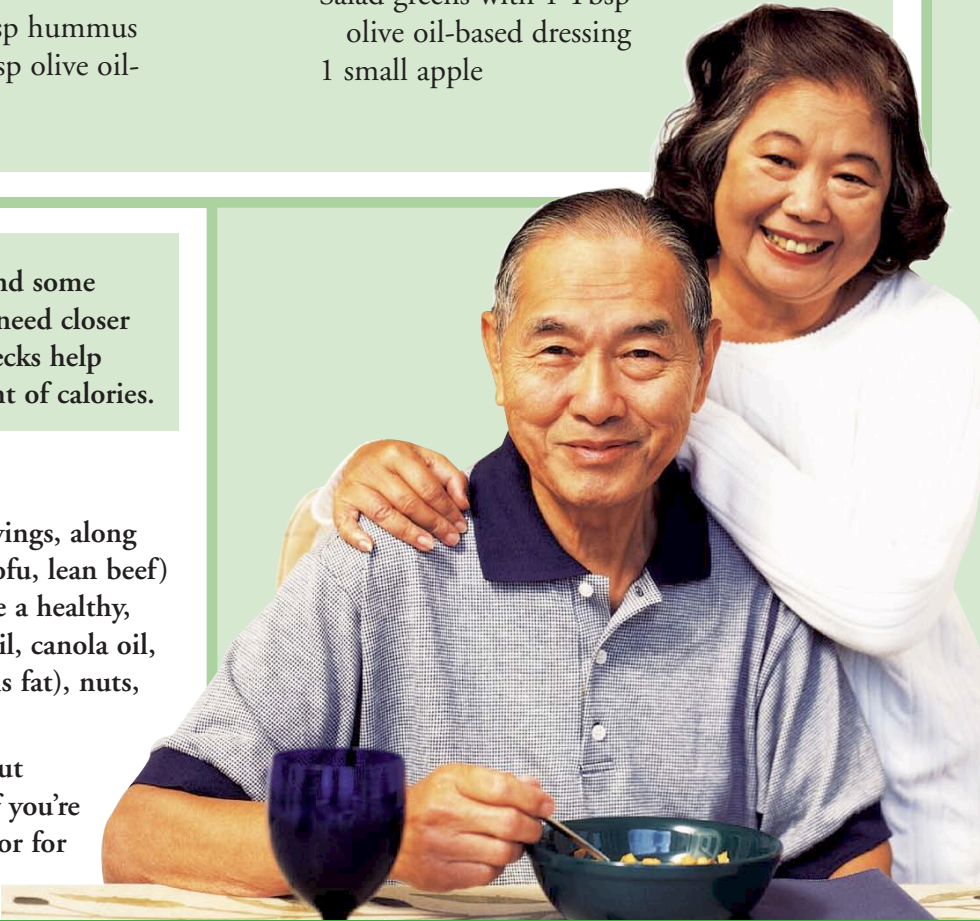
Breakfast	1 cup cooked oatmeal with 4 walnut halves and 2 Tbsp raisins 1 cup skim milk	Dinner	Beef and vegetable kabobs with 4 oz grilled lean beef and 1-2 cups grilled onions, tomatoes, zucchini and peppers. Lightly coat with 1 tsp olive oil before grilling.
Snack	6 oz non-fat lemon yogurt with 1/2 cup blueberries		2/3 cup brown rice
Lunch	1 cup lentil soup 1 oz whole wheat roll 8 baby carrots dipped in 2 Tbsp hummus 1 cup spinach salad with 1 Tbsp olive oil-based dressing		Salad greens with 1 Tbsp olive oil-based dressing 1 small apple

1600 calories is good for inactive women and some older adults. Active women and most men need closer to 2000 calories per day. Weekly weight checks help determine if you are eating the right amount of calories.

Putting it all together

Eating the recommended number of carb servings, along with some lean protein (chicken, fish, eggs, tofu, lean beef) and a small amount of “good” fat will provide a healthy, well-balanced meal. Good fats include olive oil, canola oil, peanut oil, soft tub margarines (without trans fat), nuts, and nut butters.

A registered dietitian can teach you more about calories, carb counting and meal planning. If you're interested, ask your doctor or diabetes educator for help finding a registered dietitian.



What You Should Know About Exercise or Physical Activity

Physical activity is important for everyone. For people with diabetes it is vital! When you exercise you may:

- Lower and improve blood sugar control
- Reduce how much medicine you need
- Decrease your risk of heart attack and stroke
- Lower your blood pressure
- Lower your “bad” and raise your “good” cholesterol
- Improve your circulation
- Improve your health and fitness
- Reduce stress
- Reduce depression
- Increase your energy level
- Lose weight
- Lift your spirits!

The American Diabetes Association recommends that people with diabetes be physically active for 30 minutes on most days of the week. In addition, resistance exercise should be included to help improve insulin sensitivity. Examples of resistance exercise include lifting weights and exercises using weight machines.

What To Do

Talk with your medical provider before beginning a program of physical activity that is more vigorous than brisk walking. Start slowly. Try to be physically active for 30 minutes a day. You may want to divide your exercise into two or three sessions during the day. Warm up and cool down to prevent injuries.

General guidelines for physical activity:

- Wear some form of diabetes and personal identification.
- Check your blood sugar before and after exercise. If the exercise is really intense, you may also want to check during the exercise.
- Pick an activity you enjoy — walking, swimming, gardening, dancing or even climbing the stairs.
- Put more action into your current activity at work or at home.
- Walk more instead of driving.
- Park your car farther from the door.
- Take the stairs instead of the elevator.
- Get up to change the channel....put the remote control away.
- Drink plenty of water.
- Keep a snack with you. The snack should be a quick source of sugar, for example, glucose tablets or hard candy.
- Avoid foot injuries. Make sure you have shoes that fit properly.
- Wear socks that draw dampness away from your feet.
- Check your feet before and after exercise.

Do not exercise:

- If you are not feeling well.
- In extreme heat or cold.
- If you have been drinking alcoholic beverages.
- If you take insulin and have ketones in your urine.
- If you take insulin and have pre-exercise blood sugar less than 100.

Stop exercise:

- If you have pain.
- If you are short of breath.
- If you feel light-headed.

Check with your medical provider and your diabetes educator for other precautions and suggestions.

Neighbors

“Getting enough exercise has been really tough. Everyone says ‘walk’, but with my back problems, that’s not so easy. I tried going out and walking for 30 minutes and it wiped me out! Yet, I know that it will help me lose weight, which is good for my diabetes and my back. And finally it hit me...maybe my problem was that I was trying to do too much too fast. I haven’t been exactly physically fit!

So I tried again, but this time I started really slow...The first week 5 minutes was all I could manage. When I got to the point where I could do 10 minutes, I started doing a fast part in the middle. At first it was 5 minutes at a stroll, 3 minutes going fast, and 5 minutes slow. (And I do it where it’s mostly flat, not going up a hill!) Each week I’ve increased the fast part by about 3 minutes...When I got up to 15 minutes, I found that I needed 2 weeks before I could increase the time. Sometimes you run into that kind of thing. You have to listen to your body.

It will take a while to get up to the 30 minutes a day, but I think I can make it now. (My goal is 30 minutes 5 days a week.) I have a backup plan for when my back is bad. There are all kinds of

exercises I can do with my arms that can really give me a workout. When the weather is bad, I can go to the grocery and walk up and down the aisles. Or I can march in place briskly while I watch the evening news. It looks silly, but so what? Whatever works! ”

Online resource for tracking physical activity:
<http://getmoving.vermont.gov>



Staying Healthy

Diabetes is a complex disease. It affects 50 thousand Vermonters. If you are one of them you probably know that it's a 24/7 job. Managing diabetes can be tricky, but there are many good resources and treatments to help keep you healthy. Most important, you are in

charge of managing your diabetes. This means that you need to learn all you can about diabetes, how to control your blood sugar and how to prevent complications that occur from poorly controlled diabetes. The information in this booklet is only a beginning.

What To Do

- **Take a Comprehensive Diabetes Education Course.** These courses are taught by certified diabetes educators – medical professionals who have special training in diabetes management. These courses are offered in all parts of the state. Ask your medical provider how to find the one nearest you, check www.vpqhc.org/VTADE and select community resources, or see Vermont Diabetes Education Resources on the back page.
- **Have your hemoglobin A1C (A-1-C) checked every 3-6 months. Goal: less than 7%.**
- **Schedule a yearly dilated eye exam.**
- **Have a complete foot exam every year.**
- **Have your blood pressure checked at every medical visit.**
Goal: less than 130/80.
- **Have your urine checked for microalbumin each year (for kidney disease).**

Goal: less than 30.
- **Have your cholesterol and triglycerides checked each year.**
Goal: Total cholesterol less than 200.
LDL cholesterol less than 100.
HDL cholesterol greater than 40 for men,
50 for women.
Triglycerides less than 150.
- **Schedule an appointment with a Registered Dietitian.**
- **See your dentist every 6 months.**
- **Check your blood sugar regularly.**
- **Be physically active at least 30 minutes a day.**
- **Eat healthy foods and be at a healthy weight for you.**
- **Get your influenza shot each year.**
- **Get a pneumonia shot.**
- **If you smoke, QUIT.**
- **Ask your medical provider about whether you should take aspirin each day.**

Neighbors

“Have a great vacation.”

I learned my lesson the hard way but I won't forget it. My wife, Barbara, and I like to travel. I've had diabetes for a long time and I know I can travel and be active as long as I'm careful and monitor my blood sugar. So for our 25th anniversary, we went on a one-week cruise with some friends.

At first I was checking my blood sugar faithfully. But that got tiresome and embarrassing — always having to find a bathroom or go back to our cabin to test my blood. I started taking chances. I ate at odd times. I didn't miss any of my doses of medicine, though. I just wasn't paying attention to what was going on. Not keeping things in balance was a mistake, as I found out when I almost passed out on the dance floor. Barb knew right away what had happened and insisted I eat some candy.

Then things snowballed downhill. When we went back to the cabin, Barb helped me take off my new “cruise shoes” and socks. That's when she saw the blisters. I'm used to wearing sneakers or old, comfortable boots. Those new dress shoes did me in. Of course the blisters didn't hurt, so if she hadn't seen them they would have gotten even worse.

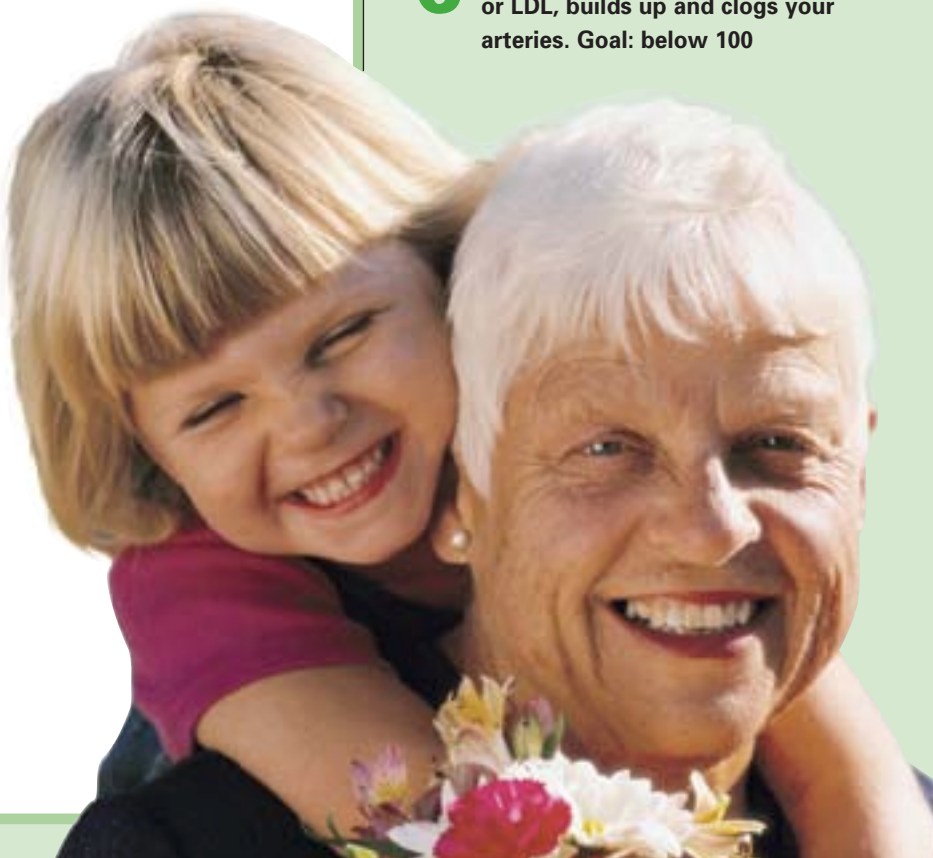
It took months for my feet to heal, but I was lucky. I'll be traveling again soon,

and this time I'll put my health first. You just can't take that long a vacation from taking care of yourself.”

Tips

Diabetes and heart disease go hand in hand. Know the ABCs of diabetes and be smart about your heart.

- a** is for **A1C**, short for hemoglobin A1C. Goal: below 7
- b** is for blood pressure. High blood pressure makes your heart work too hard. Goal: below 130/80
- c** is for cholesterol. Bad cholesterol, or LDL, builds up and clogs your arteries. Goal: below 100



What You Should Know About Checking Your Blood Sugar

Keeping your blood sugar at the right level is a very important part of managing your diabetes. It is the best way to help you stay healthy and reduce the risk of long-term complications of diabetes. Blood sugar is also called blood glucose. Sometimes your blood glucose may be too high or too low. This can happen for many different reasons. It is important for you to know when your blood glucose is too high or too low and what to do about it.

There are two blood tests that help you manage your diabetes. One of these is called self-monitoring of blood glucose (SMBG), when you check your blood sugar several times each day with a glucose meter. The other test is called an A1C, which measures your blood sugar control over the past 2-3 months.

Self-Monitoring of Blood Glucose (SMBG).

Most people check their blood sugar 2-4 times per day. The American Diabetes Association recommends that blood sugar for most people should be:

- Between 80 mg/dl and 120 mg/dl before breakfast
- Between 90 mg/dl and 130 mg/dl before other meals
- Less than 180 1-2 hours after a meal

Your medical provider may have different guidelines for you.

A1C

Most people have an A1C test done 2-4 times per year. The American Diabetes Association recommends that the A1C for people in general should be less than 7%. The American Association of Clinical Endocrinologists recommends that A1C be less than 6.5%. The goal for each individual should be as close to normal (less than 6%) as possible without hypoglycemia (low blood sugar).

Each person with diabetes is different. Work with your medical provider to determine:

- your specific blood sugar goals
- what times to check your blood sugar (usually before or 2 hours after a meal)
- how many times to check your blood sugar each day

Testing urine for sugar is no longer considered to be accurate.

What To Do

Once you know when and how often to check blood sugars, you need to get a blood

glucose meter. Meters can be purchased at most pharmacies. There are many different kinds of meters. Your medical provider will help you choose the best one for you. Most insurance plans will pay for your meter and the necessary supplies if you have a prescription from your medical provider.

To check your blood sugar you must prick your skin to get a drop of blood. Your medical provider can teach you how to use your meter.

How often should you check your blood sugar?

Blood sugar is usually measured two to four times a day, either before meals or 2 hours after meals and at bedtime.

Reasons to check your blood sugar more often:

- If you have symptoms of low blood sugar (Hypoglycemia)
- If you have symptoms of high blood sugar (Hyperglycemia)
- To learn how meals, medicine and physical activity affect your blood sugar
- If your diabetes medicine changes
- If you begin taking other kinds of medicine
- If your exercise or activity level changes
- If you are sick or have increased stress

Figuring out what the numbers mean

The results you get when you check your blood sugar can help you make adjustments to insulin, food intake, and level of physical activity.

Some people are very skilled at making their own adjustments; others need more help.

Bring your log book or recording sheet and your meter to each medical appointment. Your medical provider will help you figure out if you need to make some adjustments in your daily routine.

Neighbors

“I couldn’t imagine sticking my own finger, but the nurse showed me how. It’s not so bad. The important thing is to prevent the really bad things that diabetes can cause if you don’t keep a close watch on that blood sugar.

I have a lot of years ahead. It’s up to me whether I turn into a sick old woman or I live an active and full life. That’s an easy choice!

The hardest times to keep up with my testing schedule are when I’m away from home. I just have to go into a bathroom and get it done. Nobody’s perfect. When I get off my schedule, I just pull myself back on track and keep going.”

Tips

It is important to remember that the blood glucose meter is a tool to help you manage your diabetes. If your reading shows a number higher than your goal it may mean you have eaten too much, had less activity than usual or didn’t take quite enough insulin. It does not mean that you are bad. It simply means that you need to make some changes. A blood glucose meter is like a speedometer in a car. They

both help to keep numbers — blood glucose or driving speed — in a safe range! A lancet (also called a lancing device) is used to prick your skin to get a drop of blood. Using a lancing device can make pricking your finger easier.

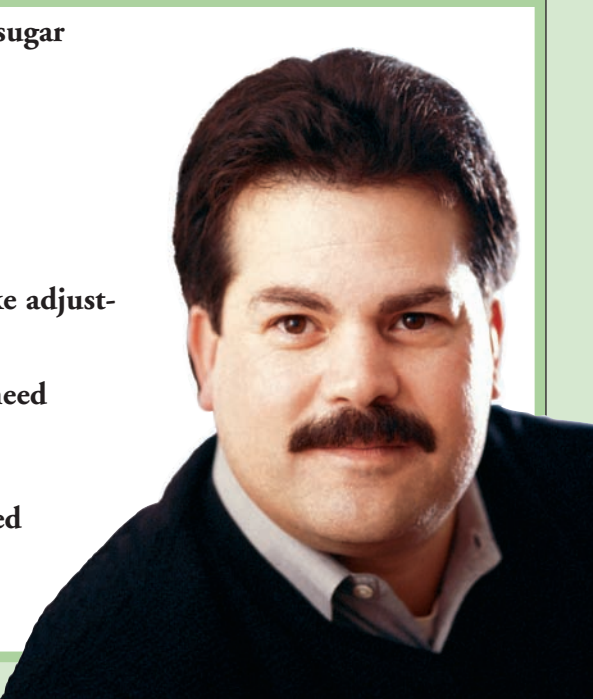
When using a finger:

- Wash hands with soap and warm water.
- If you have trouble getting a drop of blood, massage the finger gently and hold it below the waist before sticking your finger.
- Stick the side of the finger. It hurts less than the fingertip.
- The finger can be squeezed gently to increase the size of the drop of blood.
- Alternate fingers and sides of fingers.

Some blood glucose meters can be used on places other than the fingers. Make sure to rub the area until it feels warm before sticking. **CAUTION. You should only use a finger to check for low blood sugar.** Low blood sugar registers more quickly there than on the arm.

Make sure you drink plenty of fluids every day. Being well hydrated makes testing your blood sugar easier.

Each kind of meter is different. Ask your diabetes educator or medical provider to teach you how to use your meter. You can also check the instructions that come with the meter for questions. Most meters have an 800 number to call if you have questions.



What You Should Know About High Blood Sugar

Hyperglycemia is the medical word for high blood sugar. High blood sugar can occur either slowly or quickly. When your blood sugar goes up and stays high, it means that your diabetes is out of control.

If your blood sugar gets too high, you may have one or more of the following symptoms:

- increased thirst
- dry itchy skin
- feeling sick to your stomach
- increased hunger
- tired or sleepy feeling
- breathing problems
- frequent need to urinate
- blurry vision

High blood sugar can happen for many reasons:

- not taking your medicine as directed
- eating too much (especially carbohydrates)
- expired insulin (insulin that is too old or was not stored properly)
- not getting your normal activity or exercise
- getting sick or having other kinds of stress (physical or emotional)
- taking steroids or other medicines which can affect your blood sugar

What To Do

Check your blood sugar anytime you think your blood sugar may be too high.

If your blood sugar is higher than normal, but you feel well:

- **take your usual medicines at the usual times**
- **move more, even if it's around your house or at work**
- **drink several glasses of water or sugar-free liquids (without caffeine)**
- **eat your regularly planned meals**
- **check and record your blood sugar every four hours until it is back to normal**
- **If you have type 1 diabetes you should also check your urine for ketones every 4 hours, and record the results, until back to normal**

You should call your medical provider if:

- **you are vomiting, confused, sleepy, short of breath or feel dehydrated**
- **you have 2 consecutive blood sugars of more than 300 mg/dl**
- **your blood sugar stays above 180 mg/dl for more than 1 week**
- **your urine shows moderate or large amounts of ketones**

Neighbors

“What’s in a number? I sometimes feel as if I’m drowning in numbers. Doing lots of finger sticks, writing the numbers in my book, and trying to figure out what they mean. Sometimes I know why the number is high, but occasionally I can’t figure it out.

I used to think of finger sticks as blood sugar ‘tests’. But my diabetes educator said there’s no passing or failing, no ‘good’ or ‘bad’ numbers. Instead she told me to think about finger sticks as ‘checks’, to stay healthy or to help figure out how to get back on track. My blood sugar numbers go up and down. While I can’t always figure out why, most of the time I can make the numbers move in the right direction with exercise, food choices, or a change in medicine. I’m the chief detective on my health care team, checking and reporting my blood sugar numbers and other information to get the help that I need.”

Tip

Some people have a prescription for glucagon, an emergency injection given to people with very low blood sugar. Ask your medical provider if you should carry this with you.

What You Should Know About Low Blood Sugar

Hypoglycemia is the medical word for low blood sugar. When the amount of sugar in your blood becomes too low, your body cannot work the way it should. Most people with diabetes don’t feel well if their blood sugar drops below 70 mg/dl.

Low blood sugar occurs most often in people who are taking certain pills or insulin for their diabetes. If you are managing your blood sugar through diet and exercise, it is unlikely that you will develop low blood sugar.

If your blood sugar begins to fall too low, you may have one or more of the following symptoms or feelings:

- shaky or weak
- a fast heart beat (palpitations)
- a headache
- confused
- tingly around the mouth
- sweaty
- hungry
- lightheaded
- tired
- clumsy
- nervous
- angry

You might have symptoms or feelings other than those listed above. Some pills may hide symptoms of low blood sugar. Ask your medical provider if you are taking one of those medicines. Talk with your medical provider about how to prevent low blood sugar.

Some causes of low blood sugar are:

- skipping meals or snacks
- eating meals or snacks at different times
- getting more exercise than usual
- taking too much medication/insulin
- taking medication at different times
- drinking alcohol

What To Do

If you think your blood sugar is too low, CHECK YOUR BLOOD SUGAR RIGHT AWAY. If you don’t feel well enough to check, assume your blood sugar is too low.

If your blood sugar is low (less than 70) eat or drink a quick-acting source of carbohydrate:

- ***2-4 glucose tablets**
- ***tube of glucose gel**
- **½ cup of fruit juice**
- **6-8 small hard candies**
- **½ cup regular soda**
- **1 cup of skim milk**
- **small box (½ oz.) of raisins**

***Taking glucose is the preferred treatment for hypoglycemia.**

Check your blood sugar again in 15 minutes.

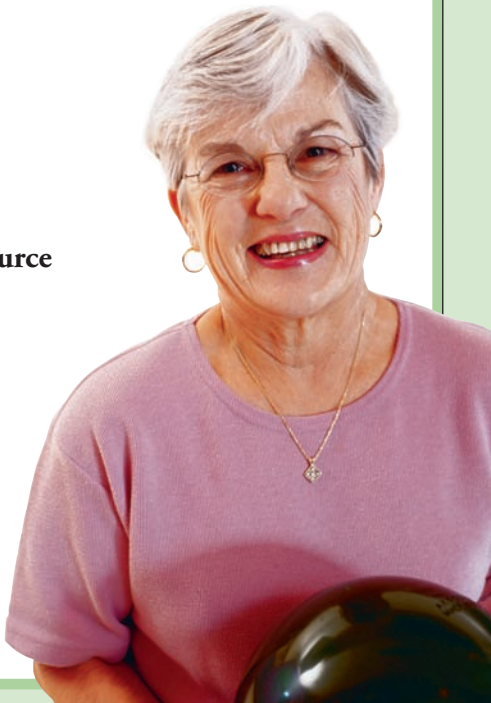
If your blood sugar is still too low (less than 70) eat or drink a quick-acting source of glucose again and recheck your blood sugar in 15 minutes.

Call your medical provider or 9-1-1 if:

- **You still don’t feel well and aren’t sure what to do.**
- **You begin to feel worse at any time.**

After successfully treating your low blood sugar, if your next meal is more than one hour away, have one of the following:

- **a glass of milk**
- **cheese with some crackers**
- **half a sandwich**



What You Should Know About Sick Care

When you are sick your body responds in a variety of ways that can cause your blood sugar to rise. You may not feel like eating the same foods. You may be less active. You may have vomiting or diarrhea and can't eat.

Some medicines that you might take for colds, coughs or pain may cause your blood sugar to go up. Be sure to discuss all medicines...even those you can get without a prescription...with your medical provider or pharmacist.

Preventing Illness

Staying healthy and preventing illness such as flu and pneumonia are especially important if you have diabetes. Pneumonia or the flu can be serious. Getting a flu shot and a pneumonia vaccine can help prevent these illnesses.

Flu

The flu shot is safe. It cannot give you the flu. Your family should also get a flu shot to protect you and them. You need to get a new flu shot every year.

Flu shots are covered by Medicare, Part B and many insurance companies. There are many flu shot clinics all over the state for high risk people (that includes people with diabetes).

Pneumonia

The pneumonia vaccine is given by a shot. It cannot give you pneumonia. You may have very mild side effects, such as redness or pain where the shot was given. Most people need to get the shot only one time. Some people who get the shot when they are under age 65 will need to get a second shot five years or longer after the first shot. The pneumonia shot can be given any time during the year.

Neighbors

Tips

Plan ahead...things to do before you get sick:

- Talk to your dietitian about foods that are good to eat if you are sick and don't feel like eating.
- Talk to your medical provider to figure out the best kind of medicine to take for

Headaches.
Stuffy nose.
If you are sick to your stomach.
Coughs.

- Talk to your medical provider to find out:

When you should call them if you are sick.
When you should get help right away.

- Write all these things down.
- Keep sick day supplies on hand.

What To Do / Sick Care

- Take your usual diabetes medicines.
- Eat if you can.
- Drink plenty of sugar-free fluid (no caffeine) every hour. Bouillon or canned clear soups can also be good.
- Check your blood sugar more often.
- Take your temperature.
- If you have type 1 diabetes, check the ketones in your urine.
- Be in touch with your medical provider. They can help you manage your blood sugar during this time.

GET HELP IF

- You can't eat or keep food down (if you vomit more than once).
- You have diarrhea more than 5 times or for more than 6 hours.
- Your blood sugar is very low or very high.
- You have moderate or large amounts of ketones in your urine.
- You are having trouble breathing.
- You are confused.
- You feel sleepier than usual.

What You Should Know About Foot Care

If you have diabetes, taking care of your feet is very important! Diabetes that is not well-managed can decrease the blood flow to your feet and damage the nerves (neuropathy). When that happens your feet may feel numb, hot or tingly. Diabetes can make the skin on your feet very dry. Dry skin can lead to cracks and sores. You may also get more calluses.

These cracks, sores and calluses combined with poor circulation can lead to foot ulcers that may be very hard to heal. If you have numb feet, it may be hard to feel any foot injury or infection, and it may go unnoticed for a long time. Prevention of foot problems is very important!

What To Do / Foot Care

1. Keep your blood sugar in good control.
2. Check your feet every day for cuts, scratches, blisters, red spots and swelling.
 - Use a mirror to check the bottoms of your feet or ask a family member for help if you have trouble seeing.
 - Treat cuts right away. Wash with soap and apply a mild antiseptic. Cover with dry sterile bandage.
3. Do not soak your feet. Wash your feet every day using mild soap in warm, not hot, water.
 - Dry your feet well, especially between the toes.
4. Keep the skin soft and smooth.
 - Rub a thin coat of skin lotion over the tops and bottoms of your feet, but not between your toes.
 - Don't use over-the-counter products or sharp objects on corns or calluses.
5. If you can see and reach your toenails, trim them each week or when needed.
 - Trim your nails in the shape of the end of your toe and file the edges with an emery board or nail file.
6. Wear comfortable shoes that fit well and protect your feet at all times.
 - Never walk bare foot, even inside.
 - Feel inside your shoes before putting them on each time to make sure the lining is smooth and there are no objects inside.
 - Wear socks that are smooth on the inside.
 - Do not wear sandals with a thong between the toes.
 - Buy your shoes at the end of the day to make sure they fit if your feet swell.
 - If you have "high risk" feet, you can get special shoes made for people with diabetes. See your podiatrist to get measured properly.
7. Protect your feet from hot and cold.
 - Wear shoes at the beach or on hot pavement.
 - Don't test bath water with your feet.
 - Don't use hot water bottles or heating pads.
8. Keep the blood flowing to your feet.
 - Put your feet up when sitting.

Neighbors

Surprise in the Mirror

“At my diabetes education class, they were talking about checking your feet every day. This is boring! So what changes from one day to the next? Well, feeling a little stupid, I get a hand mirror like they said. And start looking at the soles of my feet. Nothing hurts, or itches. Seems silly! Then, uh oh! I see it and I can't believe it. A needle — sticking right out of my foot! And it's broken off. Well, I got myself to the doctor right away. You don't fool with even a little hole in the foot. Even I know that. I just never expected to find one. I'm glad I looked.”

Tips

Take off your shoes and socks when you see your medical provider so they remember to check your feet.

If your nails are very thick, you may need help cutting them. A foot doctor (podiatrist) can help you with this.

With good care, your feet can last a lifetime.

- Wiggle your toes and move your ankles up and down for 5 minutes, 2 or 3 times a day.
- Don't cross your legs for long periods of time.
- Don't smoke.
- 9. Have your medical provider check your feet for problems briefly at every visit. A complete foot exam should be done each year.
- 10. Call your medical provider right away if you find a cut, sore, blister, or bruise on your foot that does not begin to heal after one day.

What You Should Know About Your Diabetes Medicine

Diabetes medicines lower your blood sugar. The different types are:

- Sulfonylureas (sul-fah-nil-yoo-ree'-ahs) help your body make more insulin.
- Meglitinides (Meh-gli'-ti-nides) also help the body make more insulin. They are shorter acting than sulfonylureas and are especially active after meals.
- Biguanides (by-gwan'-ides) make sure that your liver does not make too much sugar and helps your body use insulin better.
- Thiazolidinediones (thy-ah-zo'-li-deen-dye'-owns) (TZDs or glitazones) help your muscles make better use of your insulin.
- Alpha-glucosidase (al'-fa gloo-kos'-ih-days) inhibitors slow down the digestion of the carbohydrates you eat. They help slow the rise of blood sugar right after you eat.
- Dipeptidyl dipeptidase-4 (DPP-IV) inhibitors help to improve the levels of insulin after a meal and decrease the amount of sugar that the body makes.

What To Do

Most medicines should be taken at about the same time each day. Medicines should be taken as directed.

Talk with your medical provider, diabetes educator, or pharmacist:

- about what the medicine is supposed to do in your body.
- about when to take your medicine.
- about what you should do if you miss a dose.
- about possible side effects of the medicines.
- before stopping any of your medications.
- before you start any herbal medicines or dietary supplements.



Tips

Help Your Medicines Help You

The medicines you take help you stay healthy and keep your blood sugar in good control. Work in partnership with your medical provider to make sure you get the best results. Here are some tips:

- Take your medicines on time and in the correct amounts.
- If you want to stop taking a medicine or cut down the amount for any reason, discuss it with your medical provider first.
- Tell your medical provider about all the medicines you use, even over-the-counter products, vitamins and supplements.
- Keep an up-to-date list of your medicines to take with you to all medical appointments. Keep the list posted in a place that's easy to notice, inside a kitchen cabinet or on the back of your door.
- Keep all your medicines in labeled containers.
- If you forget to take your medicine, do not double up on the next dose.

Do you struggle with the cost of your diabetes drugs? They can be hard to pay for. Sometimes people skip taking their medicine because of the cost. Be sure to let your medical provider know if this is a problem for you. You may be eligible for financial assistance with your medicines.

Refer to the list below for some resources.

Healthy Vermonters Prescription Drug Program

This program is for those who have no insurance for prescription medicines or those who do not have enough income to pay for medicines. Call 1-800-250-8427.

Medicare Part D

Medicare now provides a prescription drug plan regardless of income, health status or prescription drug usage. www.medicare.gov or call 1-800-633-4227.

United Health Alliance (UHA)

UHA runs a medicine assistance program in the Bennington, VT area. Visit them at www.unitedhealthalliance.com/ or call 802-447-3170.

Veteran's Administration

Call 1-866-687-8387.

Pharmaceutical Manufacturers Assistance (PMA)

PMA is an in-house program at various drug companies, run in Vermont by Northeast Kingdom Community Action (NEKCA). You can call NEKCA at 800-639-4065 (VT only) for help in applying. The program is run statewide, not just in the Northeast Kingdom.

Common Diabetes Medicines	Medicine	Brand name	Side Effects	Comments
Sulfonylureas	glimepiride glyburide	Amaryl® Diabeta® Glynase PresTab® Micronase®	Low Blood Sugar Weight gain	Take with meal. Should not be taken if you have an allergy to sulfa antibiotics.
	glipizide	Glucotrol® Glucotrol XL®	Low Blood Sugar Weight gain	Take 30 minutes before meal.
Meglitinides	repaglinide	Prandin™	Low Blood Sugar Weight gain	Should be taken within 30 minutes before a meal. You must eat if you have taken this medication
	nateglinide	Starlix®		
Biguanides	metformin	Glucophage® Glucophage XR® Fortamet Glumetza™ Riomet Solution®	Diarrhea/Nausea Stomach upset Bloating	Take with food. Does not cause weight gain. Kidney blood test needed. Caution if over 80 years or heart failure.
Thiazolidine-diones	pioglitazone rosiglitazone	Actos™ Avandia®	Weight Gain Fluid buildup Heart failure May keep birth control pills from working	Take at same time every day. Does not need to be taken with meals. Liver function blood test needed. May increase risk of fractures. Avandia should not be used with insulin or nitrates and may increase the risk of a heart attack.
Alpha-glucosidase Inhibitors	acarbose miglitol	Precose™ Glyset™	Bloating, Gas	Taken with first bite of each meal (up to 4 doses a day).
Dipeptidyl Dipeptidase-4 inhibitors	sitagliptin	Januvia	Nasopharyngitis (swelling of the nasal passages and upper part of the throat); common cold	Taken once daily should not be used with insulin or sulfonylureas.
Other Combination Drugs	metformin/glyburide metformin/rosiglitazone metformin/glipizide rosiglitazone/glimepiride pioglitazone/metformin pioglitazone/glimepiride sitagliptin/metformin	Glucovance® Avandamet® Metaglip® Avandaryl® Actoplus Met® Duetact® Janumet™	Same side effects as individual drugs	

What You Should Know About Insulin

Insulin helps lower blood sugar by moving sugar from the blood into the cells of your body. Once inside the cells, sugar provides energy. If your body doesn’t make enough insulin, you will need to use insulin by injection (shots). Insulin may cause weight gain for some people.

There are different types of insulin. Some work very quickly, some are longer acting. Often people use two different types of insulin to manage their blood sugars around the clock and at mealtime. They all help to lower blood sugar. How fast insulin works depends on:

- Your response to insulin
- The type of insulin you take
- Your level of physical activity

Insulin strength is measured in units. The majority of insulins in the United States are U-100 strength. Outside of the United States, some countries have U-40 as well. Be sure to compare the name and strength on the vial you purchase with the vial you have been using.

There are special syringes for insulin with markings in “units”. The syringes come in 4 different sizes: 25 units, 30 units, 50 units, or 100 units. Insulin comes in a vial (small bottle) or in a pen. Some people use insulin pens for their shots. Insulin pens may hold a cartridge of insulin or be pre-filled and disposable. Pens have a dial to set the number of units of insulin. They are convenient and offer privacy. Some people use an insulin pump to give 24 hour insulin coverage.

What To Do

Developing an insulin plan that fits your lifestyle is an important part of managing your diabetes. Your plan should control blood sugar to the goals set by your medical providers. Work with them to find the right match for you.

Your diabetes educator is the key to learning:

- how to draw up insulin
- how to give insulin shots
- what special precautions to take when traveling or exercising

It is important to take the exact amount of insulin you need.

Insulin may be prescribed in addition to diabetes pills or may be used alone. Insulin may be started with just 1 shot daily but many people take 3 or more shots per day to get the best results. Sometimes people use 2 different types of insulin to help achieve better results. The dose is based on daily blood sugar results.

Check the expiration date on your insulin. Once opened, insulin generally has a shelf life of 28 to 42 days at room temperature, but insulin pens, once opened, can be safe to use from 10 to 42 days. Ask your pharmacist or diabetes educator if you are not sure. When you open a new bottle of insulin or start a new pen, mark that date on the container and then throw the insulin away when you reach the end of the shelf life, regardless of whether there is any insulin left.

Using old insulin may not give you the glucose lowering effect you expect. If you get several bottles of insulin or boxes of insulin pens at once, keep the unopened bottles (or pens) in the refrigerator. Do NOT freeze.

Keep insulin away from temperature extremes of heat and cold. If it is very hot, you should keep your insulin cool by storing it in an insulated container.

Tips

Insulin lowers your blood sugar whether you eat or not. The insulin you take and the food you eat must be balanced. Do not skip meals. Otherwise you can develop low blood sugar. Low blood sugar needs to be treated right away (see high and low blood sugar).

Usually insulin given in the belly is absorbed the fastest. If you will be doing exercise using the arm(s) or the leg(s), it is better to give the insulin in an area not directly being exercised. Otherwise, the insulin will be used faster. For example, if you are playing tennis, don’t inject the arm with which you swing the racquet. It is better to not take insulin just before a warm bath or shower since the warmth will cause the insulin to be absorbed faster.

If you have been taking multiple daily shots of insulin, counting your carbs and checking your blood sugar often, you might want to consider an insulin pump. An insulin pump provides a steady amount of background (basal) insulin over a 24 hour period with additional (bolus) insulin given to cover meals and snacks. Many people like the flexibility that an insulin pump provides. If you think this is something you might like, talk to your diabetes educator or medical provider.

Generic Name	Brand Name	Begins Working	Works hardest (peaks)	Stops Working	Comments
Lispro – very short acting	Humalog	10-15 min.	30-90 min.	4-5 hours	Should be taken just before eating. Looks clear in bottle.
Aspart – very short acting	NovoLog	10-20 min.	40-50 min.	3-5 hours	Should be taken just before eating. Looks clear and colorless in bottle.
Glulisine – very short acting	Apidra	10-15 min.	1-2 hours	3-4 hours	Should be taken 15 minutes before a meal or up to 20 minutes after the start of the meal.
Regular – short acting	Humulin R Novolin R	30-60 min.	2-4 hours	6-9 hours	Given near mealtime (30 minutes before eating). Looks clear in bottle. When combining Regular and NPH, draw up regular insulin first, then NPH.
NPH – moderate acting	Humulin N Novolin N	2-4 hours	4-8 hours	12-16 hours	Usually taken in the morning or before bed. Looks cloudy in bottle. There should be no lumps.
Glargine – long acting	Lantus	2-4 hours	all day	up to 24 hours	Do not mix with other insulins. Looks clear. Discard after 28 days.
Detemir – Long acting	Levemir	2-4 hours	all day	up to 24 hours	Do not mix with other insulins. Looks clear. Discard after 42 days.
Pre-mixed – A mixture of long and very short acting insulins	Humalog Mix 75/25	5-15 min.	4-8/ 1-2 hours		Ask your medical provider about which brand of mixed insulins is good for you.
	Humalog Mix 50/50	5-15 min.	4-8/ 1-2 hours		
	Novolog 70/30	10-20 min.	1-4 hours	up to 24 hours	
Pre-mixed – A mixture of long and short acting insulins	Humulin Mix 70/30	30-45 min.	4-8/ 2-3 hours	up to 18 hours	
	Humulin Mix 50/50	30-60 min.	2-8 hours	up to 18 hours	
	Novolin 70/30	30 min.	2-12 hours	up to 24 hours	

Other Injectable Medicines:

Medicine	Brand Name	Side Effects	Comments
Exenatide	Byetta	nausea hypoglycemia	Promotes weight loss. Helps lower blood sugars, especially after meals. Other diabetes medicine may need to be decreased. Can be used with metformin, TZDs, or sulfonylureas. It is not approved for people on insulin. May increase insulin production in the pancreas. Comes in a prefilled injector pen.
Pramlintide	Symlin	Slight nausea hypoglycemia	Decreases appetite. Slows stomach emptying. May use with insulin; not approved to use with other diabetes medicines. May need less insulin. Available in prefilled pen or vial.

Portion Size Guidelines

You may want to measure your food from time to time to remind yourself of portion sizes compared to the recommendations below.

Grains

- 1 slice (1 oz) of whole wheat bread
- 1/3 cup of cooked rice, beans or pasta (about the size of your fist or a tennis ball)
- 1/2 cup of dry oatmeal (cooks up with water to about 1 cup)
- 3/4 cup or 1 oz of unsweetened ready to eat cereal such as Cheerios or Shredded Wheat

Starchy Vegetables

- 1/2 cup corn or peas
- 1/2 cup boiled potato (1/2 medium or 3 oz — about the size of a computer mouse)
- 1 cup winter squash
- 1/3 cup baked beans
- 1/2 cup cooked beans (black, garbanzo, kidney, lima, navy, pinto, white, and lentils)

Non-starchy Vegetables – Aim to eat at least 2 to 3 servings a day. Choices include green beans, carrots, cauliflower, broccoli, cucumbers, tomatoes, mushrooms, onions, peppers, and zucchini. One serving equals:

- 1 cup of raw vegetables
- 1/2 cup cooked vegetables or vegetable juice

Note: *Salad greens such as lettuce, spinach, and Swiss chard are “free” foods and can be eaten in generous amounts.*

Fruits

- 1 small piece of fruit (about the size of your fist or a tennis ball)
- 1 cup cubed melon or berries
- 1/2 cup canned fruit in juice
- 1/4 cup dried fruit such as raisins and dates

Milk and Yogurt

- 1 cup low-fat milk
- 2/3 cup (6 oz) light yogurt
- 1 oz of cheese (size of 9 volt battery)

Lean Protein Sources – Most people can have 5 to 7 ounces of protein-rich foods per day. A small portion, 3 ounces of cooked lean meat, poultry or fish, is the size of a deck of cards.

1 ounce equivalents:

- 1 egg
- 1/4 cup tuna
- 2 Tbsp of peanut butter (size of ping pong ball)
- 1/2 cup cooked beans such as kidney beans or tofu

Healthy Fats – use sparingly to add flavor to your meals.

- 1 tsp olive, canola or peanut oil (about the size of the tip of your thumb)
- 1 Tbsp of reduced-fat mayonnaise or salad dressing (about the size of your whole thumb)
- 4 walnut or pecan halves



Neighbors

“On most days I was exercising and watching what I ate ... choosing healthy foods, but my blood sugars were still too high. I talked to my dietitian, and together we found the problem. My food portions were too big! The blood sugars came down when I cut back on starchy foods. My dietitian suggested small changes and explained how to avoid being hungry. Loading up on veggies at lunch and supper helps.

When my family eats at home we leave the serving dishes for meat and starch in the kitchen so I won't be tempted to take second helpings. But the salad and cooked veggies come into the dining room with me in case I'm still hungry. If we have leftovers of higher calorie foods I divide them into single servings that match the portions on my meal plan. For snacks I never eat from a large box or bag; instead I measure out the right amount ahead of time.

In restaurants I ask for appetizer-size portions, or I set aside food to take home in a doggy-bag. Sometimes my boyfriend and I split an entrée; it saves me from overeating and it also saves money.”

Neighbors

“When my doctor first told me I had diabetes, I knew I had a lot of information to learn. So much has changed since my mother had diabetes. I helped to take care of her at the end of her life and I saw her lose so much. Her vision first, and even, eventually, her leg.

I went to see a diabetes educator and I took a course with some other people about staying healthy. I thought the diet would be the hardest — no more of my favorite foods? But that's not true any more. I think I'm eating better meals now than I ever did. I've just been learning some new things about cooking and shopping, and trying some new recipes.

I keep testing my blood and it's pretty interesting to see how I affect my blood sugar with my own choices.

I've always liked walking, so exercise is no problem. I just do it more regularly now. A friend and I are teaming up and getting out to walk on a regular basis.

I wish my mother had all the help I've been getting, and all the new information. I told myself there's no point in sitting here feeling sorry for myself. There's a lot I can do and nobody else can do it all for me.”

Trying to Quit Smoking?

The Vermont Quit Network offers **free** nicotine replacement – gum, patches or lozenges – to all Vermonters who use the network.



every try counts

1-800-QUIT-NOW (784-8669) vtquitnetwork.org
VERMONT DEPARTMENT OF HEALTH

Vermont Resources

American Diabetes Association, Vermont
1-888-342-2383 or 1-802-654-7716

Diabetes Prevention and Control Program, Vermont Department of Health
1-800-464-4343 or 1-802-863-7606

Vermont Division for the Blind and Visually Impaired
www.dail.state.vt.us/dbvi ,
1-866-242-3284

Vermont Association of Diabetes Educators
www.vpqhc.org/VTADE

Vermont 2-1-1 – Community resources for everyday needs and difficult times.
www.vermont211.org
To call, dial 211

National Resources

American Diabetes Association
www.diabetes.org or 1-800-342-2383

American Dietetic Association
www.eatright.org or 1-800-366-1655

National Diabetes Education Program
http://ndep.nih.gov

Medicare Information
www.medicare.gov or
1-800-633-4227

National Institutes of Health Diabetes Prevention and Control Program
www.diabetes.niddk.nih.gov
1-800-860-8747

Centers for Disease Control and Prevention
www.cdc.gov/diabetes

Magazines

Diabetes Forecast
www.diabetes.org/diabetes-forecast.jsp
1-800-342-2383

Diabetes Self-Management
www.DiabetesSelfManagement.com/eds/magazine.cfm
1-800-234-0923

Other Things You Should Know About Diabetes:

Ask your medical provider or diabetes educator for more information about these topics:

- What to do if you are feeling sad or angry or unable cope with your diabetes
- How to manage stress
- Nerve damage (neuropathy) and how it affects many parts of the body
- How diabetes affects sexual health
- Dental health
- Safe driving guidelines
- When to adjust your medications for vigorous exercise
- Why smoking cessation is so important
- What to do if you are traveling

Disposing of Sharps

You should place:

- Needles
- Syringes
- Lancets
- Other sharp objects

in a hard-plastic opaque container with a screw-on or tightly secured lid, (a detergent bottle for example).

Before discarding the container, be sure to reinforce the lid with heavy-duty tape. This container goes into your regular household trash. You may even want to label the container: “NOT FOR RECYCLING.”

Resources to help you learn more about diabetes

- Registered dietitians can help you understand meal planning, carb counting and nutrition.
- Diabetes Educators and Diabetes Nurse Educators can help you understand and manage your diabetes including how to give insulin, check blood sugar, use insulin pens and pumps.
- Pharmacists can help you understand your medications.
- Podiatrists can help you care for your feet.
- Special diabetes magazines can help you learn about the latest research, news, tools and tips to manage your diabetes.
- Diabetes courses are offered all over the state and are usually covered by insurance. Check the list on this page for the one closest to you.
- Support groups are located in many areas of the state. Check www.diabetes.org, put in your ZIP code and follow the prompts for support groups or call 1-800-342-2383.

Notes

Vermont Diabetes Education Resources

Brattleboro Memorial Hospital	Brattleboro	802-251-8429
Central Vermont Medical Center	Barre	802-371-4152
Copley Hospital Diabetes Education Program	Morrisville	802-888-8226
Diabetes Center of the Lamoille Valley at Johnson Health Clinic	Johnson	802-635-6689
Fletcher Allen Health Care Children's Services Adult's Services	Burlington	802-847-6200 802-847-4576
Gifford Medical Center	Randolph	802-728-4441
Green Mountain Nutrition Associates	Barre	802-476-7607
Mount Ascutney Hospital and Health Care Center	Windsor	802-674-7198
North Country Hospital	Newport	802-334-4155
Northeast Vermont Regional Hospital	St. Johnsbury	802-748-7433
Northwestern Medical Center	St. Albans	802-524-1031
Porter Medical Center	Middlebury	802-388-4723
Rutland Region Diabetes and Endocrinology Center	Rutland	802-775-7844
Southwestern Vermont Medical Center	Bennington	802-447-5315
Springfield Hospital	Springfield	802-885-7508
Veterans Administration	White River Jct.	866-687-8387
Dartmouth Hitchcock Medical Center Children's Services Adult's Services	Hanover (NH)	603-653-9877 603-650-8530

This guide is not meant to cover every topic about diabetes, nor is it a substitute for the advice of trained professionals. A person with diabetes should get regularly scheduled check-ups from a qualified medical provider.

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